



Chapter 5: Test Notes



Indications and Recorded Values

- ◆ **G-S.5.2.2 Digital Indication and Representation.**
 - All values agree and round correctly.
- ◆ **G-S.5.6. Recorded Representations.**
 - Must be printed digitally.



T.N.5. Repeatability

- ◆ Results from several weighings of the same load under reasonably static test conditions shall agree within the absolute value of maintenance tolerance and be within applicable tolerance.
 - Doesn't change with applicable tolerance.
 - Accurate repositioning of the test weights is crucial.
 - See G-S.5.4 for Specification.



T.N.4. Agreement of Indications

- ◆ **T.N.4.1. Multiple/Recording Elements**
 - apply tolerances independently.
- ◆ **T.N.4.2. Single Indicating/Recording Element (full capacity weighbeam)**
 - differences must not exceed the absolute value of the applicable tolerance and must be in tolerance



T.N.4. Agreement of Indications

◆ T.N.4.3. Single Indicator with Multiple Elements (analog indicators)

- differences not greater than $\frac{1}{2} d$ and each must be within tolerances.

◆ T.N.4.4. Shift or Section Test

- differences must not exceed the absolute value of the maintenance tolerance and must be in tolerance (e.g., not + or – 1 d but 1 d)



N.1.9. Zero Load Balance Change

- ◆ A zero load balance change test shall be conducted on all scales after the removal of any test load.
- ◆ The zero load balance should not change by more than the minimum tolerance applicable.
- ◆ See also G-UR.4.2. Abnormal Performance



Examination Procedure

- ◆ Inspection
- ◆ Pretest Determinations
- ◆ Test
- ◆ Evaluation of Results



Digital Tests

- ◆ Zone of Uncertainty
- ◆ Discrimination
- ◆ Width of Zero



Operational Features and Controls

- ◆ During the test you should determine if operational features work as intended and if they comply with appropriate handbook requirements.
 - *zero controls, tare, indicators, recorders, remote indicators, motion detection (S.2.1.2.) for printing, zeroing functions (S.2.1.3.), wireless connections, hidden functions, ticket printers, etc.*
- ◆ These features vary widely among devices and new ones are constantly emerging.



Summary

- ◆ Inspection must include a comprehensive evaluation of the indicating and recording elements and accessories.
- ◆ Digital indications are required to function within specific limits and your observations may indicate that additional testing is needed.
- ◆ Checking zero is one of the most important steps of the test.